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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,393

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Kazumasa Morichika

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FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 Fifth Avenue
16TH Floor
NEW YORK, NY 10001-7708

EXAMINER

DEBROW, JAMES J

ART UNIT

PAPER NUMBER

2176

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,393	Applicant(s) MORICHIKA, KAZUMASA	
	Examiner JAMES J. DEBROW	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/14/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to communications: Amendment filed 14 Feb. 2008.

Claims 1-13 are pending in this case. Claims 1 and 13 are independent claims.

Applicant's Response

In Applicant's Response dated 14 Feb. 2008, Applicant amended claims 1-13; and argued against all rejections previously set forth in the Office Action dated 14 Nov. 2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitaguchi in view of Olson et al. (Patent No.: US 6,830,340 B2; Filed: Dec. 26, 2001) (hereinafter 'Olson').

Regarding independent Claims 1 and 13, Kitaguchi discloses *a projection apparatus for projecting a document image, generated based on a document, onto a screen, comprising:*

a projection section which projects said document image onto said screen (col. 2, lines 21-24; col. 4, lines 46-51; Kitaguchi discloses a projection surface on which a predetermined projection image is displayed through projection.).

an image pickup section which picks up an image of said screen (col. 2, lines 27-30; col. 4, lines 53-67; Kitaguchi discloses a photography part for photographing image data drawn on the writing surface by means of an image-pickup part.).

a processor section which acquires a first picked-up image on said screen by causing said projection section to project said document image onto said screen and causing said image pickup section to pick up the image of said screen, and acquires a second picked-up image of only recorded information recorded on said screen by causing said projection section to stop projecting said document image onto said screen and causing said image pickup section to pick up the image of said screen (col. 4, lines 47-61; col. 5, lines 29-35; col. 5, lines 29-35; col. 5, lines 57-60; col. 8, lines 41-64; Kitaguchi discloses a function for extracting an image drawn by a user (second picked-up image of only recorded information recorded) from an image taken (first picked-up image) through the CCD camera. Kitaguchi also discloses switches for controlling ON/OFF of the projection during the photography process to prevent floodlighting of the projector from being applied in photographing a user-drawn image by the CCD camera. Kitaguchi further discloses at the time of photography of a user-drawn image formed on the writing field, a stepper, or the like, places a light-blocking plate in front of the projector, thereby preventing the light-beam from reaching the transparent screen. Thus Kitaguchi discloses said projection section to stop projecting said document image onto

said screen and causing said image pickup section to pick up the image of said screen.).

an image memory section which stores said first picked-up image and said second picked-up image, acquired by said processor section, as data in association with each other (col. 6, lines 40-52; col. 5, lines 28-61; Kitaguchi discloses storage part for the user-drawn image (second picked-up image) and the projection image (first picked-up image).).

Kitaguchi does not expressly disclose *a detachable storage unit*.

However Olson teaches *a detachable storage unit* (col. 4, lines 10-45; Olsen teaches a presentation card, memory card, as a storage device used to store and transfer images. Olson teaches the user may insert a presentation card having a prestored presentation into a image receiver. The prestored image may then be automatically transferred to image the projector.).

Therefore at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine Olson with Kitaguchi for the benefit of providing a data transfer device to enable image-rendering devices to receive images from multiple sources (col. 3, line 45-col. 4, line 59).

Regarding dependent Claim 2, Kitaguchi discloses *the projection apparatus according to claim 1, further comprising an image processing section which acquires, from said second picked-up image stored in said image memory section, a*

corresponding document based on relationship information indicating a correspondence relationship between said document said second picked-up image pastes said second picked-up image to an image of said acquired document, thereby generating a combined image (col. 5, lines 37-45; col. 6, lines 40-65; Kitaguchi discloses the producing an image (combined image) in combination of an image displayed onto the projector and an user-drawn image taken in by the camera. Kitaguchi also discloses correspondence between the user-drawn image and the projection image.).

wherein said processor section causes said projection section to project said combined image generated by said image processing section (col. 6, lines 53-65; Kitaguchi discloses projecting the combined image.).

Regarding dependent Claim 3, *Kitaguchi discloses the projection apparatus according to claim 2, wherein said image processing section acquires a document based on said first picked-up image corresponding to said second picked-up image for image combination by using said first picked-up image stored in said image memory section as said relationship information (col. 6, lines 40-65; Kitaguchi discloses the projection image is made to have a correspondence to the user-drawn image in response to the switch operation when the user-drawn image is take by the camera.).*

Regarding dependent Claim 4, *Kitaguchi discloses the projection apparatus according to claim 3, wherein said image processing section acquires a document by obtaining a correlation between patterns of said first picked-up image and said*

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document image using said first picked-up image stored in said image memory section as said relationship information (col. 6, lines 16-52).

Regarding dependent Claim 12, Kitaguchi discloses *the projection apparatus according to claim 1, wherein said processor section causes said projection section to project said first picked-up image stored in said image memory section onto said screen (col. 4, lines 62-67).*

NOTE

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP 2123.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitaguchi in view of Olson further in view of MacLean et al. (Patent No.: US 7,131,061 B2; Filed: Nov. 30, 2001) (hereinafter 'MacLean').

Regarding dependent Claim 5, Kitaguchi in view of Olson does not expressly disclose *the projection apparatus according to claim 2, wherein said document is comprised of plural pages of data, and*

said processor section acquires page information indicating a page of said document from said first picked-up image stored in said image memory section and stores said acquired page information as said relationship information in said image memory section.

MacLean teaches *the projection apparatus wherein said document is comprised of plural pages of data* (col. 5, lines 45-60; MacLean teaches a electronic representation of a document may represent several physical pages.).

said processor section acquires page information indicating a page of said document from said first picked-up image stored in said image memory section and stores said acquired page information as said relationship information in said image memory section (col. 5, lines 45-60; col. 8, lines 52-64; MacLean teaches using OCR (Optical Character Recognition) for acquiring page information. MacLean also teaches page identifiers that identify page numbers in a document.).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine MacLean with Kitaguchi in view of Olson for the benefit of recording image data of a rendered hardcopy document (col. 1, lines 60-63).

Regarding dependent Claim 6, Kitaguchi in view of Olson does not expressly disclose *the projection apparatus according to claim 5, wherein said processor section acquires page information of said document by performing character recognition on character images included in said first picked-up image.*

MacLean teaches *wherein said processor section acquires page information of said document by performing character recognition on character images included in said first picked-up image* (col. 5, lines 45-60; MacLean teaches using OCR (Optical Character Recognition) for acquiring page information.).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine MacLean with Kitaguchi in view of Olson for the benefit of recording image data of a rendered hardcopy document (col. 1, lines 60-63).

Regarding dependent Claim 7, Kitaguchi in view of Olson does not expressly disclose *the projection apparatus according to claim 6, further comprising a document memory section which stores said document and document information on said document, and*

wherein said processor section acquires position information indicating a print position of a page in said document from said document information stored in said

document memory section, discriminates a page position based on said acquired position information and acquires said page information of said document by performing character recognition on character images at said discriminated page position.

MacLean teaches a document memory section which stores said document and document information on said document (col. 2, lines 8-15; col. 9, lines 9-14; MacLean teaches storing in memory identifiers and electronic representation of a hardcopy document.).

wherein said processor section acquires position information indicating a print position of a page in said document from said document information stored in said document memory section, discriminates a page position based on said acquired position information and acquires said page information of said document by performing character recognition on character images at said discriminated page position (col. 5, lines 45-60; col. 8, lines 11-34; MacLean teaches using OCR (Optical Character Recognition) for acquiring page information. MacLean teaches the printer or printer/print server renders image data and associates an identifier with image data. MacLean also teaches the identifier may be either at a section, page, document level, or a combination thereof.).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine MacLean with Kitaguchi in view of Olson for the benefit of recording image data of a rendered hardcopy document (col. 1, lines 60-63).

Regarding dependent Claim 8, Kitaguchi in view of Olson does not expressly disclose *the projection apparatus according to claim 2, wherein said processor section performs image conversion of said document information on said document into a bar code as said relationship information, combines said converted bar code with said first picked-up image stored in said image memory section, and stores said combined image in said image memory section.*

MacLean teaches *wherein said processor section performs image conversion of said document information on said document into a bar code as said relationship information, combines said converted bar code with said first picked-up image stored in said image memory section, and stores said combined image in said image memory section* (col. 5, lines 22-36; col. 8, lines 20-24; MacLean teaches using a camera to form an electronic representation of the document and storing it in memory. MacLean also teaches identifier are printed on a hardcopy document in the form of bar code. Thus MacLean teaches the concept of documents with bar codes.).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine MacLean with Kitaguchi in view of Olson for the benefit of recording image data of a rendered hardcopy document (col. 1, lines 60-63).

NOTE

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon

for all that it would have reasonably suggested to one having ordinary skill in the art.
See MPEP 2123.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitaguchi in view of Olson further in view of Merrill et al. (Pub. No.: US 2007/0033528 A1; Effective Filed Date: May 7, 1998) (hereinafter 'Merril').

Regarding dependent Claim 9, Kitaguchi in view of Olson does not expressly disclose *the projection apparatus according to claim 2, wherein said processor section acquires a display start time at which said document information is projected and displayed on said screen and a display end time as said relationship information with a same standard between said document information and said second picked-up image, and stores said display start time and said display end time in said image memory section.*

Merril teaches the *processor section acquires a display start time at which said document information is projected and displayed on said screen and a display end time as said relationship information with a same standard between said document information and said second picked-up image, and stores said display start time and said display end time in said image memory section (0041-0042; Merrill teaches a counter which marks the times of the slide changes during a lecture presentation. The time is recorded in a file and stored in memory.).*

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Merrill with Kitaguchi in view of Olson for the benefit of real-time image data marking for identification of individual images (0009).

Regarding dependent Claim 10, Kitaguchi in view of Olson does not expressly disclose *the projection apparatus according to claim 2, further comprising a management information memory section which stores management information for managing storage locations of said document, said first picked-up image and said second picked-up image document information, and*

wherein said image processing section uses said management information stored in said management information memory section as said relationship information.

Merril teaches *a management information memory section which stores management information for managing storage locations of said document, said first picked-up image and said second picked-up image document information* (0068; Merrill teaches creating a directory or folder on the secondary storage device with a unique name to hold source files (*first picked-up image and said second picked-up image document*) for a particular lecture.).

wherein said image processing section uses said management information stored in said management information memory section as said relationship information (0068; 0070).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Merrill with Kitaguchi in view of Olson for the benefit of real-time image data marking for identification of individual images (0009).

Regarding dependent Claim 11, Kitaguchi in view of Olson does not expressly disclose *the projection apparatus according to claim 2, wherein said processor section stores said relationship information added to a property of said second picked-up image in said image memory section.*

Merril teaches *wherein said processor section stores said relationship information added to a property of said second picked-up image in said image memory section* (0068; 0070-0071; Merrill teaches the digital image can be stored into an image format such as a JPEG format graphic file.).

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Merrill with Kitaguchi in view of Olson for the benefit of real-time image data marking for identification of individual images (0009).

NOTE

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP 2123.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. A new ground(s) of rejection is made in view of Kitaguchi, Merrill, MacLean and Olson.

It is noted that Applicant's amendment to the independent claim significantly changes the scope of the claimed invention when interpreted as a whole.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Debrow whose telephone number is 571-272-5768. The examiner can normally be reached on 8:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAMES DEBROW
EXAMINER
ART UNIT 2176

/Doug Hutton/
Doug Hutton
Supervisory Primary Examiner
Technology Center 2100